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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/402,185	03/25/2002	Karl-Erik Knipstrom	C36305	6575

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Dvorak & Orum
53 West Jackson Boulevard
Chicago, IL 60604-3606

EXAMINER

JOHNSON, JONATHAN J

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8, 38-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Spinella et al. (5,829,664). Spinella et al. teaches workpieces to be welded are positioned on a work-table and by means of clamping device clamped to one another and/or to the work-table and according to which a rotating welding means is arranged to move along a joint between the workpieces while being pressed against said workpieces during the welding, wherein additional heat is supplied to the joint prior to and/or during the welding operation, in excess of the frictional heat generated in the joint from the rotation of the welding means and of any other heat that may be supplied to the joint in any other manner by the welding means (Figures; column 1, lines 10-67; column 2, lines 20-21 and 42-49 and column 3, lines 16-29); and a work-table supporting workpieces to be welded, at least one clamping device for clamping the workpieces to one another and/or to the work-table, and a welding means adapted to be advanced along a joint between the workpieces while being pressed against said workpieces during the welding, and a heating element for supply of additional heat to the joint prior to and/or during the welding operation, in excess of the frictional heat generated in the joint from the rotation of the welding

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means and of any other heat that may be supplied to the joint in any other manner by the welding means (Figures; column 1, lines 10-67; column 2, lines 20-21 and 42-49 and column 3, lines 16-29).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spinella et al. (5,829,664). Spinella et al. teaches preheating the joint, but fails to teach pre-heating the joint to a maximum of 250C below the fusion temperature of the material of the joint. At the time of the invention it would have been obvious to one of ordinary skill in the art to pre-heat the joint to a maximum of 250C below the fusion temperature of the material of the joint, so that the workpieces are softened without melting the workpieces. This would allow the workpieces to still be friction stir welded with an increased travel speed.

Allowable Subject Matter

Claims 3-7 and 9-37 are allowed.

Response to Arguments

Applicants argue "current alone does not produce heat." The examiner agrees. Applicant goes on to argue that Spinella does not teach the claim 1 limitation of "additional heat is supplied to the joint prior to and/or during the welding operation." The examiner disagrees. During patent examination, the pending claims must be "given the broadest reasonable interpretation." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). In the instant case, it is the examiner's position that while the current travels from feature 30 to feature 10, the work piece that the current travels through will generate additional heat, albeit a small amount, because it is not a superconductor.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177.

The examiner can normally be reached on M-Th 7:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jonathan Johnson
Primary Examiner
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